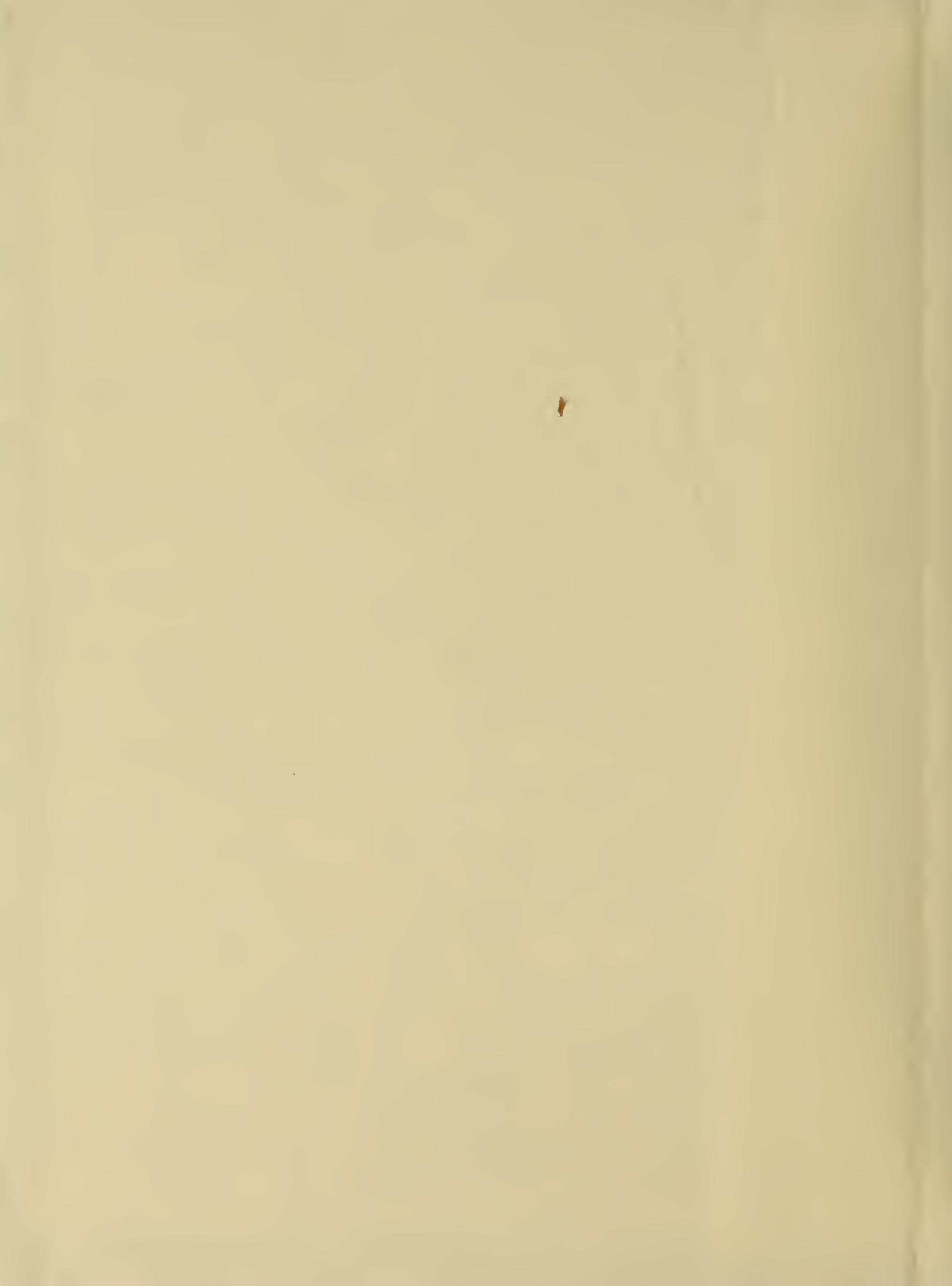


ce  
s room

LIBRARY  
BUREAU OF THE CENSUS







Census  
HD  
9715  
.U52  
U52x  
1984  
[v.2]  
no.24  
c.4

# 1982

## • Census of Construction Industries

---

CC82-I-24

INDUSTRY SERIES

### Wrecking and Demolition Work Special Trade Contractors

Industry 1795

---



---

The publications  
from the 1982 Economic and  
Agriculture Censuses are dedicated  
to the memory of Shirley Kallek,  
Associate Director for Economic Fields.  
During her career at the Bureau of the  
Census (1955 to 1983), she continually  
directed efforts to improve  
the timeliness and accuracy of  
economic statistics.

---



FINAL REPORT  
INDUSTRY SERIES

1982  
**Census of  
Construction Industries**

CC82-I-1 to 28  
Changed October 1986

**CHANGE SHEET**

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series C82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



U.S. Department  
of Commerce  
BUREAU OF  
THE CENSUS



# 1982 Census of Construction Industries

---

CC82-1-24

INDUSTRY SERIES

## Wrecking and Demolition Work Special Trade Contractors

Industry 1795

---

Issued November 1984



**U.S. Department of Commerce**  
Malcolm Baldrige, Secretary  
Clarence J. Brown, Deputy Secretary  
Sidney Jones, Under Secretary for  
Economic Affairs

**BUREAU OF THE CENSUS**  
John G. Keane,  
Director

---



## BUREAU OF THE CENSUS

John G. Keane, Director

C. L. Kincannon, Deputy Director

Charles A. Waite, Associate Director for  
Economic Fields

John H. Berry, Assistant Director for  
Economic and Agriculture Censuses

## CONSTRUCTION DIVISION

Leonora M. Gross, Chief

**ACKNOWLEDGMENTS**—Many persons participated in the various activities of the 1982 Census of Construction Industries. Primary direction of the program was performed by Shirley Kallek, Associate Director for Economic Fields (until May 1983), Charles A. Waite, her successor, and Michael G. Farrell, Assistant Director for Economic and Agriculture Censuses (until August 1984), and John H. Berry, his successor.

This report was prepared in the Construction Statistics Division under the general direction of Leonora M. Gross, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

The computer processing system was developed and coordinated under the direction of Barbara M. Walter. Richard W. Swartz made significant contributions to the planning and development of the computer programs, and Herbert S. Isham was responsible for the implementation of those programs. The computer programs were also developed and written by John Sibley, Clifford Jordan, Linda M. Mersch, Adele Cerrelli, and Dan G. Sansbury. Mary D. Brady was responsible for most of the data preparation specifications and procedures. Matthew R. Golas was responsible for the coordination with the Computer Services Division. Johnnye Pringle was responsible for production control of the computer processing. Under the direction of Jesse Pollock, Edward K. Ricketts and Dennis K. Duke developed the sampling plans, some computer processing specifications, and quality control procedures.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative record processing, and quality control, along with the associated electronic computer programs, were developed in the Economic Surveys Division, W. Joel Richardson, Chief.

Planning, design, review, and composition of report forms were performed in the Administrative Services Division, Robert L. Kirkland, Chief.

Publication planning, design, editorial review, composition, and printing procurement were performed in the Publications Services Division, Raymond J. Koski, Chief.

Geographic coding procedures and associated computer programs were developed in the Geography Division, Robert W. Marx, Chief.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed in the Data Preparation Division, Don L. Adams, Chief.

Computer processing was performed in the Computer Services Division, C. Thomas DiNenna, Chief (until February 1984), and John E. Halterman, his successor.

Photocomposition programs for the statistical tables were developed in the Systems Support Division, Larry J. Patin, Chief (until October 1983), and Arnold E. Levin, his successor.

Special-purpose computer programs for disclosure analysis were developed in the Business Division, Gerald F. Cranford, Chief (until December 1983), and Howard N. Hamilton, his successor.

The overall planning and review of the census operations were performed by the staff of the office of the Assistant Director for Economic and Agriculture Censuses.

Special acknowledgment is also due to the many businesses whose cooperation has contributed to the publication of these data.

### Library of Congress Cataloging in Publication Data

Census of construction industries (1982)

1982 census of construction industries.

Contents: [1] Geographic area series — [2] Industry series.

Supt. of Docs. no.: C 3.245/7: CC82-I-

1. Construction industry--United States--Statistics.

I. United States. Bureau of the Census. II. Title.

HD9715.U52C466 1984 338.4'7624'0973

83-600141

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

# INTRODUCTION

	Page
ECONOMIC CENSUSES OVER TIME . . . . .	III
USES OF THE ECONOMIC CENSUSES . . . . .	III
AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES . . . . .	IV
METHOD OF ACCOUNTING AND TIME COVERED . . . . .	IV
CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION . . . . .	IV
ESTABLISHMENT BASIS OF REPORTING . . . . .	V
SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES . . . . .	V
CENSUS REPORT FORMS . . . . .	VII
DATA PROCESSING . . . . .	VII
GEOGRAPHIC CLASSIFICATION . . . . .	VII
DUPLICATION IN RECEIPTS . . . . .	VII
SPECIAL TABULATIONS . . . . .	VIII
RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS . . . . .	VIII
COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA . . . . .	VIII
ABBREVIATIONS AND SYMBOLS . . . . .	VIII

## ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications<sup>1</sup> (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

## USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

## AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

## METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

## CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.<sup>1</sup> This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

**Contract construction**—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

1. **Building construction by general contractors**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
2. **Other construction by general contractors**—Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
3. **Construction by special trade contractors**—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

**Construction on their own account, for sale**—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

**Subdividers and developers, except cemeteries**—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

## ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

## SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

### Employer Firms

**Developing the sampling frame for employer firms**—This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownership of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multi-establishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

**Selecting the employer sample**—A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

**Estimation procedures for 1982 and 1977 data**—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum x_i p_i}{n_c}$$

$$i = 1$$

where:  $x'_c$  is the simple unbiased estimate of a characteristic for a publication cell.

$x_i$  is the reported value of a characteristic for an individual establishment in the publication cell.

$p_i$  is the selection probability of that firm.

$n_c$  is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

**Reliability of employer statistics**—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for

establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

## Nonemployer Firms

**General**—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

**Qualifications to the nonemployer data**—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

## CENSUS REPORT FORMS

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

## DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

## GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

## DUPLICATION IN RECEIPTS

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and non-construction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is

defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

## SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

## RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

## COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- \* Sampling error exceeds 40 percent.
- \*\* All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- ‡ Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

# Users' Guide for Locating Statistics in This Report by Table Number

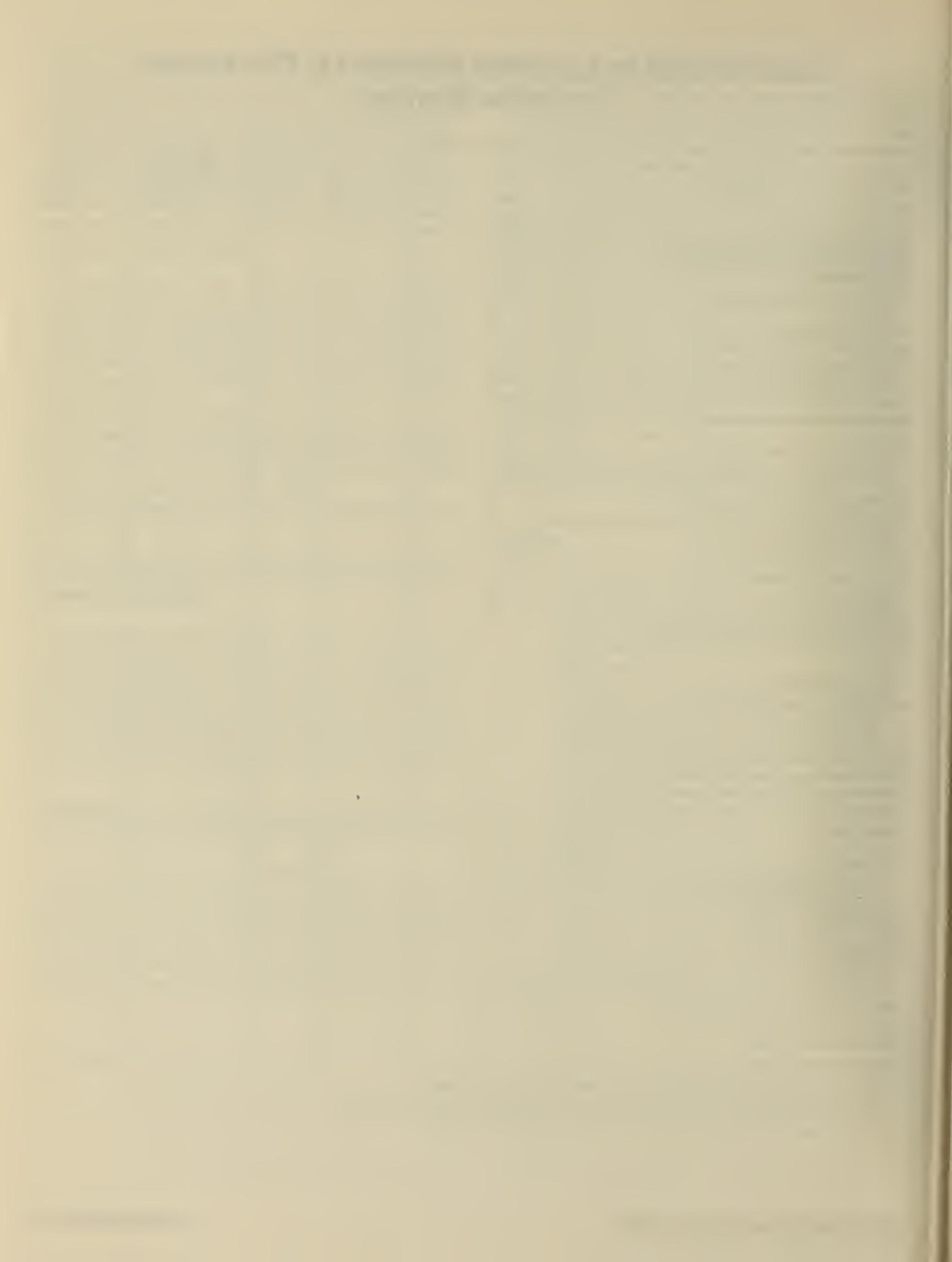
Statistics	For U.S.	By State	By employment size	By receipts size	By type, class, ownership, kind of business, and location of construction <sup>1</sup>	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment .....	3					
End of year—total .....	1, 3	1		5	6	
End of year—structures, machinery and equipment .....	3					
Depreciation charges during the year—structures, machinery and equipment .....	3					
Capital expenditures:						
Total capital expenditures .....	1, 3	1		5	6	
New structures—machinery and equipment .....	3					
Used structures—machinery and equipment .....	3					
Communication services, payments for .....	2					
Employees:						
All employees—average number .....	1, 2	1		5	6	
Construction workers—average number .....	1, 2, 9					8
Other employees—March .....	2					
Employer costs for fringe benefits—legally required and voluntary expenditures .....	2					
Establishments:						
Number in business at end of year .....	2					
Number in business during the year .....	1, 2, 4, 9	1, 9		5	6	8
Hours—construction workers:						
Total .....	1, 2, 9	1, 9		5	6	
Quarterly .....	2, 9	9				
Inventories .....	4					
Materials, components, supplies, and fuels—payments for .....	1, 2	1		5	6	
Payroll:						
First quarter, all employees .....	2					
Annual:						
All employees .....	1, 2	1		5	6	
Construction workers .....	1, 2	1				8
Other employees .....	2					
Power, fuels, and lubricants—payments for .....	2					
Profile of the industry—selected industry averages .....	12					
Proprietors and working partners .....	2					
Ratios, State .....	13	13				
Receipts:						
All business receipts .....	2			5	6	
Construction receipts, total .....	1, 2, 4	1		5	6	2, 7, 10
For work subcontracted in from others .....	2					8
Other business receipts and land receipts <sup>2</sup> .....	2					
Net construction receipts .....	1, 2	1		5	6	
Value added .....	1, 2	1		5	6	8
Rental payments:						
Total .....	1, 2	1		5	6	
For machinery and equipment .....	2					
For structures .....	2					
Repairs to structures and related facilities .....	2					
Repairs to machinery and equipment .....	2					
Storage capacity for fuels <sup>3</sup> .....	2					
Subcontract work to others, payments for .....	1, 2	1		5	6	8

Note: Data for 1977 and earlier years are also available in some of these tables.

<sup>1</sup>Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned.

<sup>2</sup>Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only.

<sup>3</sup>Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.



# **Wrecking and Demolition Work Special Trade Contractors**

## **CONTENTS**

[Page numbers listed here omit the prefix that appears as part of the number of each page]

---

	Page
Introduction .....	III
Users' Guide for Locating Statistics in This Report by Table Number .....	IX
Summary of Findings .....	3

---

### **TABLES**

#### **Statistics for Establishments With Payroll**

1. General Statistics by State: 1982 and 1977 .....	4
2. Detailed Statistics: 1982 and Earlier Census Years .....	6
3. Assets, Capital Expenditures, and Depreciation: 1982 and Earlier Census Years .....	7
4. Value of Inventories : 1982 and 1981 .....	7
5. Selected Statistics by Employment Size Class: 1982 and 1977 .....	8
6. Selected Statistics by Receipts Size Class: 1982 and 1977 .....	8
7. Construction Receipts by Type of Construction: 1982 and 1977 .....	9
8. Selected Statistics by Specialization in Types of Construction: 1982 .....	9
9. Quarterly Construction Worker Hours and Employment by State: 1982 .....	10
10. Construction Receipts by Location of Construction Work: 1982 and 1977 .....	12
11. All Business Receipts by Kind of Business Activity: 1982 and 1977 .....	13
12. Profile of Establishments in This Industry: 1982 and Earlier Census Years .....	13
13. Selected Industry Ratios by State: 1982 .....	14

**Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.**

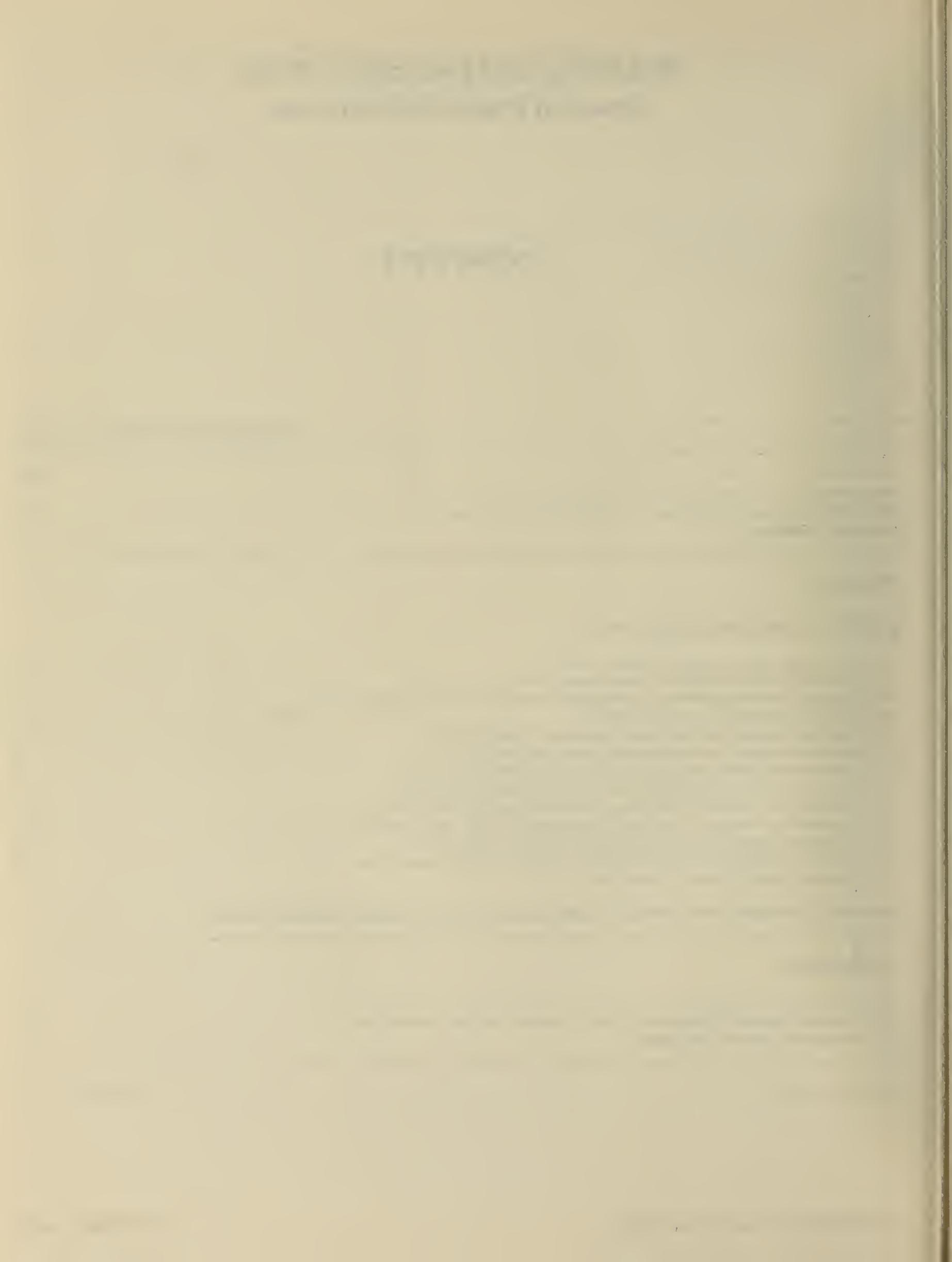
---

### **APPENDIXES**

A. Explanation of Terms .....	A-1
B. Standard Industrial Classification Titles for Industry Groups and Industries .....	B-1
C. Geographic Divisions and States .....	C-1

---

Publication Program .....	Inside back cover
---------------------------	-------------------



# SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in the wrecking and demolition of buildings and other structures, with or without the sale of material derived from demolishing operations. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.<sup>1</sup>

During 1982, there were 890 establishments with payroll classified in this industry.<sup>2</sup> All business receipts of these establishments amounted to \$403 million, of which \$377 million were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$36.2 million, leaving net construction receipts of about \$341 million. Value added for 1982 was \$314 million. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$32.9 million for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$20.1 million were also made for selected power, fuels, and lubricants purchased during the year from other companies or received from other establishments of the parent company.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

<sup>2</sup>Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

Establishments with 10 employees or more, while representing only 25 percent of the total number of employer establishments in this industry, accounted for 74 percent of all business receipts.

Total average employment in the industry showed an increase of 1 percent from 1977 to a total of 8.4 thousand employees. Total payroll for 1982 amounted to \$130 million. Hours worked by construction workers during the first quarter of 1982 were 2.4 million hours, while hours worked during the third quarter were 2.9 million hours.

Payments of \$24.9 million for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 700 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1982								
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Total construction receipts	Net construction receipts†	
		All	Construction workers	All employees	Construction workers				
	A	B	C	D	E	F	G	H	
United States	890	8 402	7 201	130 077	107 158	10 391	376 895	340 696	
Alabama	13	61	50	705	543	78	1 831	1 783	
Alaska	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Arizona	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Arkansas	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
California	131	976	821	15 425	12 580	1 133	52 295	47 114	
Colorado	6	8	8	102	102	14	521	480	
Connecticut	10	116	95	2 498	2 018	169	7 458	7 364	
Delaware	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
District of Columbia	3	(D)	(D)	(D)	202	16	1 338	1 338	
Florida	22	164	139	2 012	1 623	237	6 393	6 132	
Georgia	8	102	82	1 241	973	110	3 128	(D)	
Hawaii	3	(D)	13	(D)	142	10	1 068	(D)	
Idaho	-	-	-	-	-	-	-	-	
Illinois	56	711	612	13 683	11 991	927	28 136	26 649	
Indiana	14	87	70	909	755	89	3 081	2 899	
Iowa	6	27	20	(D)	179	30	853	(D)	
Kansas	5	(D)	41	(D)	(D)	(D)	(D)	1 137	
Kentucky	9	(D)	13	(D)	131	17	504	478	
Louisiana	9	112	92	1 763	1 511	172	4 203	4 016	
Maine	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Maryland	14	67	54	1 242	1 012	81	3 969	3 330	
Massachusetts	28	321	277	5 680	4 810	486	13 879	11 890	
Michigan	39	376	315	6 863	5 535	503	20 640	18 831	
Minnesota	7	84	63	1 480	1 250	89	3 708	(D)	
Mississippi	-	-	-	-	-	-	-	-	
Missouri	13	82	65	947	548	122	5 534	(D)	
Montana	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Nebraska	*7	*16	*16	*335	*335	*47	*1 092	*1 034	
Nevada	*6	(D)	(S)	(D)	(D)	(D)	(D)	(D)	
New Hampshire	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
New Jersey	44	677	583	11 597	9 818	776	30 651	29 914	
New Mexico	*6	(D)	18	(D)	*246	*41	*766	(D)	
New York	105	1 444	1 286	20 445	17 155	1 466	57 085	51 687	
North Carolina	8	160	134	(D)	1 069	192	(D)	(D)	
North Dakota	-	-	-	-	-	-	-	-	
Ohio	40	402	352	7 075	5 780	447	20 590	17 490	
Oklahoma	22	130	111	1 489	1 095	199	6 487	6 242	
Oregon	16	(D)	48	(D)	548	93	2 016	1 891	
Pennsylvania	52	554	471	10 047	7 709	756	29 813	24 489	
Rhode Island	9	28	24	(D)	281	36	1 297	1 190	
South Carolina	3	(D)	(S)	(D)	(S)	(S)	(S)	(S)	
South Dakota	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Tennessee	11	(D)	131	(D)	1 047	120	3 014	2 441	
Texas	46	352	305	4 923	3 981	440	17 372	16 331	
Utah	3	83	72	1 241	985	121	(D)	2 622	
Vermont	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
Virginia	22	263	223	3 351	2 644	492	13 156	10 316	
Washington	27	166	137	3 251	2 563	168	8 105	7 681	
West Virginia	11	142	121	2 586	2 095	171	5 373	5 228	
Wisconsin	31	190	157	2 115	1 746	249	6 369	5 864	
Wyoming	5	(S)	(S)	(S)	(S)	(S)	(S)	(S)	

## 1982-Con.

## 1977

Relative standard  
error of estimate  
(percent) for  
column—Location  
of establish-  
ment

Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub- contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††	Relative standard error of estimate (percent) for column—			
	I	J	K	L	M	N	O	P	Q	B	H	M
313 761	53 033	36 198	24 496	15 755	168 289	8 295	240 630	210 606	1	1	1	U.S.
1 775	310	48	130	116	1 104	134	2 206	2 075	7	15	(W)	Ala.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	Alaska
(D)	(D)	(D)	(S)	(S)	(S)	33	534	452	—	—	—	Ariz.
(D)	(D)	(D)	(D)	(D)	(D)	50	*1 162	*1 151	—	—	—	Ark.
43 831	6 514	5 181	6 165	2 697	21 460	821	26 329	24 219	8	5	7	Calif.
442	(D)	41	(D)	(D)	172	35	570	516	(W)	(W)	—	Colo.
6 669	862	94	592	(D)	3 275	160	5 280	4 847	(W)	(W)	—	Conn.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	Del.
1 065	240	(D)	64	34	687	103	4 364	2 668	—	—	(W)	D.C.
5 390	1 090	261	623	531	3 040	148	3 977	3 762	14	11	10	Fla.
2 633	367	(D)	243	262	3 597	142	3 463	3 179	(W)	—	(W)	Ga.
927	129	(D)	83	(D)	410	84	1 949	1 745	—	—	—	Hawaii
—	—	—	—	—	—	—	—	—	—	—	—	Idaho
26 753	4 228	1 487	1 778	2 531	19 673	539	20 306	17 260	3	2	4	Ill.
2 784	336	182	130	130	1 264	129	3 627	3 180	(W)	(W)	(W)	Ind.
844	44	(D)	7	—	27	57	1 494	1 234	(W)	—	—	Iowa
(D)	186	(D)	9	15	59	39	961	879	—	(W)	(W)	Kans.
437	58	26	21	7	169	92	2 489	1 952	—	(W)	(W)	Ky.
3 712	652	187	380	190	2 174	88	1 863	1 680	(W)	(W)	(W)	La.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	Maine
3 085	532	639	156	162	1 443	97	2 917	2 521	(W)	(W)	(W)	Md.
10 485	2 497	1 989	675	619	7 801	322	8 705	8 873	1	2	(W)	Mass.
17 848	2 374	1 809	1 110	428	6 598	465	15 546	11 774	1	(W)	(W)	Mich.
3 049	585	(D)	74	(D)	2 157	(S)	(S)	311	(W)	—	—	Minn.
—	—	—	—	—	(D)	(D)	262	—	—	—	—	Miss.
3 223	894	(D)	465	60	1 415	122	3 165	2 759	5	—	(W)	Mo.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	Mont.
*916	*58	3	4	208	(S)	(D)	(D)	55	58	(W)	—	Nebr.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	Nev.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	1 102	898	—	—	—	N.H.
26 873	3 790	737	1 376	874	15 402	479	16 894	15 289	2	3	(W)	N.J.
*725	*130	(D)	19	19	759	59	1 064	1 075	—	(W)	(W)	N. Mex.
47 595	7 369	5 397	1 845	2 174	18 062	1 058	34 406	29 438	2	3	(W)	N.Y.
(D)	(D)	(D)	25	153	2 712	102	3 126	2 650	(W)	—	(W)	N.C.
—	—	—	—	—	(D)	(D)	(D)	(D)	—	—	—	N. Dak.
16 220	2 566	3 100	845	834	12 712	511	13 387	11 930	7	3	(W)	Ohio
5 522	883	245	365	760	3 935	50	1 488	1 380	13	21	10	Okla.
1 598	343	*125	108	*27	*1 013	29	1 425	1 182	—	33	47	Oreg.
21 125	7 315	5 324	2 755	477	8 526	870	25 033	22 329	8	1	(W)	Pa.
1 189	170	107	37	96	837	(D)	890	741	(W)	(W)	(W)	R.I.
(S)	(D)	(S)	(S)	(S)	(S)	(D)	468	452	—	—	—	S.C.
(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	—	—	S. Dak.
2 290	229	573	60	66	565	117	2 130	1 918	—	(W)	(W)	Tenn.
14 763	1 915	1 041	820	386	7 556	373	9 263	7 588	4	3	6	Tex.
2 277	344	(D)	102	—	521	(D)	(S)	(S)	(W)	(W)	—	Utah
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—	Vt.
9 373	1 848	2 840	1 747	603	7 194	163	2 556	2 298	4	4	(W)	Va.
7 349	1 091	424	1 244	678	4 989	242	6 240	5 641	3	3	(W)	Wash.
4 643	801	145	117	224	2 909	*80	*807	*778	16	17	23	W. Va.
5 247	(D)	*505	185	(D)	1 849	114	3 119	2 966	27	30	—	Wis.
(S)	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(D)	—	—	—	Wyo.

Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
Number of establishments in business during year	890	978	1 027	1 071	3	3	6	9
Number of establishments in business at end of year	877	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Proprietors and working partners	223	359	462	653	11	6	12	12
All employees**	8 402	8 295	9 067	10 218	2	1	4	2
Construction workers:								
March	6 967	6 160	7 237	8 847	1	1	4	4
May	6 932	7 418	7 650	9 134	1	1	5	3
August	7 572	7 553	7 953	8 859	2	2	6	3
November	7 009	6 803	6 843	8 340	2	2	4	3
Average	7 201	6 998	7 544	8 870	1	2	4	3
Other employees:								
March	1 201	1 235	1 487	1 371	2	2	5	4
Construction worker hours (thousands):								
January to March	2 402	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
April to June	2 433	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
July to September	2 891	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
October to December	2 664	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Total hours worked	10 391	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Payroll, all employees	130 077	89 020	80 173	62 166	1	1	3	2
Payroll, construction workers	107 158	70 233	64 081	51 232	1	1	3	2
Payroll, other employees	22 919	18 787	16 092	10 932	1	1	4	2
First quarter payroll, all employees	29 731	18 809	(NA)	(NA)	1	1	(NA)	(NA)
Employer costs for fringe benefits	24 866	17 780	(NA)	(NA)	1	1	(NA)	(NA)
Legally required expenditures	17 693	11 186	(NA)	(NA)	2	1	(NA)	(NA)
Voluntary expenditures	7 173	6 594	(NA)	(NA)	1	1	(NA)	(NA)
All business receipts	402 993	258 204	236 678	173 320	1	1	4	2
Total construction receipts	376 895	240 630	219 412	161 457	1	1	4	2
Receipts for work subcontracted in from others	110 771	63 673	55 522	38 548	3	4	6	6
Land receipts <sup>1</sup>	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	26 098	17 574	17 266	11 873	1	1	3	3
Net construction receipts†	340 696	229 161	202 581	150 826	1	1	4	2
Value added††	313 761	210 606	195 358	144 711	1	1	4	2
Selected payments	89 232	47 598	41 320	28 622	1	1	6	5
Materials, components, and supplies <sup>2</sup>	32 903	25 857	24 489	17 966	2	1	4	6
Construction work subcontracted to others	36 198	11 470	16 831	10 630	1	1	13	7
Selected power, fuels, and lubricants	20 130	10 271	(NA)	(NA)	2	2	(NA)	(NA)
Electricity	1 346	801	(NA)	(NA)	2	2	(NA)	(NA)
Natural gas	453	353	(NA)	(NA)	4	29	(NA)	(NA)
Gasoline and diesel fuel (including gasohol)	16 899	8 072	(NA)	(NA)	2	1	(NA)	(NA)
Other, including lubricating oils and greases	1 431	1 046	(NA)	(NA)	2	2	(NA)	(NA)
Storage capacity for fuels <sup>3</sup> (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures	24 496	13 912	(NA)	(NA)	1	2	(NA)	(NA)
For machinery and equipment	21 437	13 003	18 858	13 200	1	2	10	5
For structures	3 059	909	(NA)	(NA)	5	4	(NA)	(NA)
Selected purchased services	23 209	16 881	(NA)	(NA)	1	1	(NA)	(NA)
Communication services	3 490	2 031	(NA)	(NA)	3	2	(NA)	(NA)
Repairs to structures and related facilities	603	391	(NA)	(NA)	10	1	(NA)	(NA)
Repairs to machinery and equipment	19 116	14 460	(NA)	(NA)	1	1	(NA)	(NA)
Ownership of construction projects:								
Total construction receipts	376 895	240 630	219 412	161 457	1	1	4	2
Government owned	85 470	50 156	54 616	50 480	4	2	5	4
Privately owned	291 424	190 475	164 796	110 977	2	2	4	3

<sup>1</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>2</sup>For 1967 and 1972, includes data for power, fuels, and lubricants.

<sup>3</sup>Data were collected only for establishments classified as heavy construction contractors.

**Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1982 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
<b>STRUCTURES, MACHINERY, AND EQUIPMENT</b>								
Beginning-of-year gross book value of depreciable assets	157 008	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Capital expenditures, other than land	15 755	17 558	17 409	8 129	3	2	10	5
New	9 496	9 765	13 319	5 598	3	1	12	5
Used	6 259	7 793	4 090	2 531	3	4	12	11
Retirements and disposition of depreciable assets	4 474	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets	168 289	129 356	88 842	(NA)	2	1	7	(NA)
Depreciation charges during year	19 932	13 416	10 781	(NA)	2	1	7	(NA)
<b>Structures, Additions, and Related Facilities</b>								
Beginning-of-year gross book value of depreciable assets	8 297	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
Capital expenditures, other than land	681	454	999	580	11	7	1	1
New structures and related facilities	298	310	414	289	(W)	1	9	13
Used structures and related facilities	383	144	585	291	20	(W)	22	19
Retirements and disposition of depreciable assets	—	(NA)	(NA)	(NA)	—	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets	8 978	7 206	4 781	(NA)	5	3	5	(NA)
Depreciation charges during year	1 297	826	364	(NA)	3	9	6	(NA)
<b>Machinery and Equipment</b>								
Beginning-of-year gross book value of depreciable assets	148 711	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Capital expenditures, other than land	15 074	17 104	16 410	7 549	2	2	13	7
New machinery and equipment, including automobiles and trucks	9 197	9 455	12 905	5 309	3	1	13	2
New automobiles and trucks, intended primarily for highway use	3 700	3 904	(NA)	(NA)	1	1	(NA)	(NA)
Used machinery and equipment, including automobiles and trucks	5 876	7 649	3 505	2 240	2	4	13	12
Retirements and disposition of depreciable assets	4 474	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets	159 310	122 150	84 061	(NA)	2	1	7	(NA)
Depreciation charges during year	18 635	12 590	10 417	(NA)	2	1	7	(NA)

**Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	890	3
Total construction receipts	376 895	1
Establishments with inventories:		
Number	144	21
Total construction receipts	102 845	2
Inventories <sup>1</sup> :		
End of 1982, total	3 174	5
Value for establishments with LIFO reserve	(D)	—
Amount of LIFO reserve	(D)	—
Value for establishments with no LIFO reserve	(D)	—
End of 1981, total	4 116	6
Value for establishments with LIFO reserve	(D)	—
Amount of LIFO reserve	(D)	—
Value for establishments with no LIFO reserve	(D)	—
Establishments with no inventories:		
Number	746	3
Total construction receipts	274 050	2

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1982</b>										
Number of establishments	890	474	190	127	73	23	2	1	-	-
All employees**	8 402	903	1 226	1 706	2 111	1 668	788	(D)	-	-
Payroll, all employees	130 077	10 416	16 876	24 885	37 656	31 953	8 291	(D)	-	-
Construction worker hours (thousands)	10 391	1 172	1 475	2 018	2 881	2 154	688	(D)	-	-
All business receipts	402 993	47 832	57 119	78 622	111 851	107 569	(D)	(D)	-	-
Total construction receipts	376 895	45 844	54 746	74 356	105 328	78 461	18 160	(D)	-	-
Net construction receipts†	340 696	41 645	50 342	69 461	89 102	90 146	(D)	(D)	-	-
Value added††	313 761	37 048	45 872	63 210	77 205	72 443	17 981	(D)	-	-
Payments for materials, components, supplies, and fuels	53 033	6 584	6 842	10 517	18 419	7 854	2 816	(D)	-	-
Payments for construction work subcontracted to others	36 198	4 199	4 404	4 894	16 226	6 475	(D)	(D)	-	-
Rental payments for machinery, equipment, and structures	24 496	2 177	3 132	5 423	7 473	6 291	(D)	(D)	-	-
Capital expenditures, other than land	15 755	1 694	2 216	3 481	4 170	4 194	(D)	(D)	-	-
End-of-year gross book value of depreciable assets	168 289	20 628	25 247	39 029	47 424	26 998	8 962	(D)	-	-
<b>1977</b>										
All employees**	8 295	1 116	1 574	2 053	2 029	678	847	(D)	-	-
Total construction receipts	240 630	29 896	46 256	53 535	70 601	19 185	21 157	(D)	-	-
Value added††	210 606	25 261	40 305	46 953	58 464	20 294	19 329	(D)	-	-
<b>1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees**	2	5	7	5	1	(W)	(W)	-	-	-
Net construction receipts†	1	7	6	3	1	(W)	-	-	-	-
Capital expenditures, other than land	3	19	8	3	(W)	(W)	-	-	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with all business receipts of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1982</b>											
Number of establishments	890	(S)	81	152	206	143	96	64	21	10	-
All employees**	8 402	(S)	162	418	964	1 081	1 435	1 849	1 138	1 232	-
Payroll, all employees	130 077	(S)	882	3 739	10 822	14 138	21 746	36 153	21 731	20 379	-
Construction worker hours (thousands)	10 391	(S)	172	449	1 134	1 325	1 845	2 383	1 628	1 356	-
All business receipts	402 993	(S)	3 157	11 472	34 543	49 660	67 065	98 557	71 020	66 131	-
Total construction receipts	376 895	(S)	3 071	11 055	33 208	47 437	63 131	94 078	66 483	57 126	-
Net construction receipts†	340 696	(S)	2 872	10 270	30 720	44 083	58 005	82 643	60 201	50 657	-
Value added††	313 761	(S)	2 541	9 185	27 324	39 359	52 971	71 544	56 129	53 542	-
Payments for materials, components, supplies, and fuels	53 033	(S)	417	1 502	4 731	6 947	8 968	15 578	8 608	6 120	-
Payments for construction work subcontracted to others	36 198	(S)	199	785	2 488	3 354	5 126	11 434	6 282	6 469	-
Rental payments for machinery, equipment, and structures	24 496	(S)	80	425	1 437	2 399	3 693	6 626	4 154	5 592	-
Capital expenditures, other than land	15 755	(S)	*78	444	1 287	1 686	2 439	4 114	2 688	2 956	-
End-of-year gross book value of depreciable assets	168 289	(S)	724	4 082	14 407	26 818	32 464	42 232	23 554	23 606	-
<b>1977</b>											
All employees**	8 295	(S)	335	710	1 669	1 330	1 221	1 577	1 099	(D)	(NA)
Total construction receipts	240 630	(S)	4 337	12 186	40 749	39 091	44 383	63 442	134 551	(D)	(NA)
Value added††	210 606	(S)	3 520	10 744	34 771	33 897	39 148	53 530	133 365	(D)	(NA)
<b>1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees**	2	-	28	13	9	6	2	1	(W)	(W)	-
Net construction receipts†	1	-	16	10	8	7	2	1	(W)	(W)	-
Capital expenditures, other than land	3	-	41	39	25	8	(W)	(W)	(W)	(W)	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

\*Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

**Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Construction receipts			Relative standard error of estimate (percent) for column—		
	Total	New construction <sup>1</sup>	Maintenance and repair			
	A	B	C	A	B	C
<b>1982</b>						
Total construction receipts <sup>‡</sup>	376 895	(S)	(S)	1	-	-
Building construction	(S)	(S)	(S)	-	-	-
Nonbuilding construction	(S)	(S)	(S)	-	-	-
<b>1977</b>						
Total construction receipts <sup>‡</sup>	240 630	(S)	(S)	1	-	-
Building construction	(S)	(S)	(S)	-	-	-
Nonbuilding construction	(S)	(S)	(S)	-	-	-

<sup>1</sup>For this industry, data for additions and alterations were not collected separately. These data are included with "New Construction."

**Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982**

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees <sup>**</sup>	Payroll, all employees	Total construction receipts		Net construction receipts <sup>†</sup>	Value added <sup>††</sup>	Payments for construction work subcontracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H	B	D	H
All establishments	890	8 402	130 077	376 895	289 010	340 696	313 761	36 198	2	1	1
Establishments not specializing by type	142	1 740	26 339	77 818	(NA)	69 466	66 629	8 352	4	3	2
Establishments specializing 51 percent or more	748	6 662	103 738	299 077	289 010	271 230	247 131	27 846	2	1	2

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	890	7 201	10 391	6 967	2 402	6 932	2 433
Alabama	13	50	78	60	22	51	20
Alaska	1	(D)	(D)	(D)	(D)	(D)	(D)
Arizona	4	(D)	(D)	(D)	(D)	(S)	(D)
Arkansas	2	(D)	(D)	(D)	(D)	(D)	(D)
California	131	821	1 133	772	249	792	265
Colorado	6	8	14	9	3	9	4
Connecticut	10	95	169	86	36	95	40
Delaware	2	(D)	(D)	(D)	(D)	(D)	(D)
District of Columbia	3	(D)	16	(D)	3	25	4
Florida	22	139	237	132	52	129	53
Georgia	8	82	110	101	28	80	28
Hawaii	3	13	10	19	2	12	2
Idaho	-	-	-	-	-	-	-
Illinois	56	612	927	612	208	564	211
Indiana	14	70	89	58	20	79	22
Iowa	6	20	30	17	5	18	6
Kansas	5	41	(D)	36	(D)	33	16
Kentucky	9	13	17	13	4	13	4
Louisiana	9	92	172	81	36	98	44
Maine	1	(D)	(D)	(D)	(D)	(D)	(D)
Maryland	14	54	81	49	16	52	17
Massachusetts	28	277	486	273	114	244	102
Michigan	39	315	503	245	100	288	110
Minnesota	7	63	89	62	21	70	25
Mississippi	-	-	-	-	-	-	-
Missouri	13	65	122	35	20	50	27
Montana	1	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska	7	16	47	16	(S)	16	(S)
Nevada	6	(S)	(D)	(S)	(D)	(S)	(D)
New Hampshire	4	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey	44	583	776	597	198	588	185
New Mexico	6	18	*41	24	(S)	17	*12
New York	105	1 286	1 466	1 267	335	1 256	353
North Carolina	8	134	192	122	38	130	41
North Dakota	-	-	-	-	-	-	-
Ohio	40	352	447	281	91	326	107
Oklahoma	22	111	199	125	48	99	49
Oregon	16	48	93	37	*18	41	21
Pennsylvania	52	471	756	448	175	488	185
Rhode Island	9	24	36	21	8	24	8
South Carolina	3	(S)	(S)	(D)	(S)	(S)	(S)
South Dakota	2	(D)	(D)	(D)	(D)	(D)	(D)
Tennessee	11	131	120	(D)	25	77	18
Texas	46	305	440	399	125	332	109
Utah	3	72	121	(D)	(D)	70	28
Vermont	2	(D)	(D)	(D)	(D)	(D)	(D)
Virginia	22	223	492	240	130	222	118
Washington	27	137	168	119	33	139	40
West Virginia	11	121	171	134	45	123	38
Wisconsin	31	157	249	138	61	144	54
Wyoming	5	(S)	(S)	(S)	(S)	-	-

<sup>1</sup>Sum of construction workers during pay periods including 12th of March, May, August, and November.

# Payroll by State: 1982

July to September		October to December		Relative standard error of estimate (percent) for column—												Location of establishment
Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)	B	C	D	E	F	G	H	I	J	K			U.S.
H	I	J	K													
7 572	2 891	7 009	2 664	1	1	1	2	1	1	1	1	1	2	2	20	U.S.
45 (D)	17 (D)	42 (D)	17 (D)	8 -	9 -	7 -	16 -	8 -	17 -	9 -	20 -	10 -	20 -	20 -	Ala. Alaska	
(S)	(S)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-	Ariz.	
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-	Ark.	
805	299	869	317	9	7	7	8	8	8	10	8	12	13	13	Calif.	
9 101 (D)	4 48 (D)	6 95 (D)	3 43 (D)	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	Colo. Conn. Del.	
(D)	4	(D)	(D)	-	-	-	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	D.C. Fla.	
153	71	135	60	14	19	15	25	13	21	15	20	15	21	21	21	Idaho
81 (D)	30 2	63 (D)	22 3	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	Ga. Hawaii	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ill.	
633 68	257 24	608 70	249 21	3 (W)	2 (W)	3 (W)	4 (W)	3 (W)	4 (W)	3 (W)	3 (W)	4 (W)	3 (W)	4 (W)	3 (W)	Ind.
32 47 12 98 (D)	11 (D)	16 48 14 88 (D)	6 (D)	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	(W) -	Iowa Kans. Ky. La. Maine
57 281 378 50 -	26 137 148 18	54 280 329 66	22 132 143 24	(W) 1 1 (W)	(W) 2 1 (W)	(W) 4 1 (W)	(W) 3 1 (W)	(W) 1 (W)	(W) 2 (W)	(W) 2 1 (W)	(W) 2 1 (W)	(W) 2 1 (W)	(W) 2 1 (W)	(W) 2 1 (W)	(W) 2 1 (W)	Md. Mass. Mich. Minn. Miss.
98 (D)	40 (D)	80 (D)	34 -	6 -	7 -	(W) -	12 -	8 -	13 -	4 -	10 -	11 -	16 -	16 -	Mo. Mont.	
*16 (S)	(S)	*16 (S)	55 (D)	68 -	55 -	-	55 -	-	-	55 -	-	55 -	-	-	-	Nebr. Nev. N.H.
566 14 1 431 148	193 438	574 16 1 122	198 *11 338	2 24 2 51	3 51 2 (W)	3 18 2 (W)	5 3 3 (W)	2 1 1 (W)	4 26 1 (W)	1 58 3 (W)	3 31 2 (W)	3 2 4 (W)	2 2 4 (W)	2 2 4 (W)	4 27 2 2 -	N.J. N. Mex. N.Y. N.C. N. Dak.
375 94 53 520 21	121 51 *27 217	402 124 47 416	127 51 *25 178	8 13 23 9	6 25 36 7	6 9 19 8	7 19 43 6	8 17 18 7	10 35 40 6	7 14 23 10	6 28 43 5	9 15 25 12	9 15 15 12 (W)	9 15 25 12 (W)	Ohio Okla. Oreg. Pa. R.I.	
(D)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	-	-	S.C. S. Dak.
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-	-	Tenn.
(D)	36	184	40	(W)	(W)	-	(W)	(W)	(W)	-	(W)	-	(W)	(W)	6	Tex.
257 90	119 36	214 (D)	87 (D)	3 -	3 (W)	5 -	4 -	2 -	5 -	5 -	4 -	2 -	4 -	5 -	6	Utah
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-	-	Vt. Va.
220	124	(D)	217	118	5	5	5	5	5	5	8	7	8	7	8	8
154	48	133	45	3	5	3	11	3	10	3	10	3	10	3	9	Wash.
113	41	111	46	19	18	21	24	16	17	24	28	24	21	22	22	W. Va.
174	66	166	67	29	28	30	39	26	29	30	37	30	37	35	35	Wis. Wyo.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1982					1977 construction receipts for work done in this State	Percent change 1982/1977 (col A-F)	Relative standard error of estimate (percent) for column—									
	Construction receipts for work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State													
		Number	Construction receipts	Number	Construction receipts			A	B	C	D	E	F	G	A	C	E
United States	376 895	876	320 023	218	56 871	240 630	56.6	1	1	1	1	1	1	1	1	1	1
Alabama	2 209	13	1 831	3	378	2 425	-8.9	13	15	(W)							
Alaska	(D)	1	(D)	-	-	(D)	(D)	-	-	-							
Arizona	(D)	4	(D)	-	-	(D)	(D)	-	-	-							
Arkansas	337	2	(D)	2	(D)	*1 277	-73.6	(W)	-	-							
California	48 950	131	(D)	1	(D)	27 151	80.3	6	-	-							
Colorado	561	6	(D)	1	(D)	727	-22.8	(W)	-	-							
Connecticut	7 288	10	(D)	2	(D)	4 585	59.0	(W)	-	-							
Delaware	332	2	(D)	1	(D)	(S)	(S)	(W)	-	-							
District of Columbia	3 536	3	(D)	9	(D)	2 838	24.6	(W)	-	-							
Florida	6 694	21	6 291	9	403	4 093	63.5	12	11	14							
Georgia	2 169	8	(D)	3	(D)	3 722	-41.7	(W)	-	-							
Hawaii	1 101	3	1 068	*7	33	1 959	-43.8	(W)	(W)	14							
Idaho	58	-	-	3	58	(S)	(S)	(W)	-	-							
Illinois	23 962	56	23 463	3	498	16 815	42.5	2	2	(W)							
Indiana	4 575	13	3 067	7	1 507	3 691	24.0	(W)	(W)	(W)							
Iowa	1 063	5	(D)	1	(D)	2 014	-47.2	(W)	-	-							
Kansas	1 979	5	(D)	5	(D)	1 264	56.6	(W)	-	-							
Kentucky	2 891	9	504	4	2 387	2 509	15.2	(W)	(W)	(W)							
Louisiana	5 137	9	4 203	3	934	5 081	1.1	(W)	(W)	(W)							
Maine	(D)	1	(D)	2	(D)	(S)	(D)	-	-	-							
Maryland	7 562	14	3 452	7	4 110	2 420	212.5	(W)	(W)	(W)							
Massachusetts	15 645	27	13 295	6	2 350	10 252	52.6	2	2	(W)							
Michigan	19 836	38	(D)	1	(D)	15 675	26.5	(W)	-	-							
Minnesota	4 622	7	3 708	9	914	2 961	56.1	6	(W)	31							
Mississippi	216	-	-	4	216	629	-65.7	(W)	-	-							
Missouri	5 842	13	5 526	4	316	3 845	51.9	(W)	(W)	(W)							
Montana	(D)	1	(D)	1	(D)	(D)	(D)	-	-	-							
Nebraska	2 024	*7	*1 092	8	932	2 100	-3.6	35	58	30							
Nevada	(D)	*6	(D)	1	(D)	(S)	(D)	-	-	-							
New Hampshire	617	3	(D)	4	(D)	1 112	-44.5	(W)	-	-							
New Jersey	29 441	43	21 173	12	8 267	(S)	(S)	5	7	(W)							
New Mexico	*742	*6	*742	-	-	1 078	-31.2	43	43	-							
New York	64 583	102	48 227	12	16 356	35 205	83.4	3	4	(W)							
North Carolina	6 312	8	(D)	3	(D)	3 402	85.5	(W)	-	-							
North Dakota	-	-	-	-	-	(D)	(D)	-	-	-							
Ohio	18 279	39	16 378	9	1 900	15 693	16.5	2	3	(W)							
Oklahoma	4 680	22	4 233	*3	*446	1 223	282.7	7	5	55							
Oregon	2 318	16	1 991	6	326	866	167.7	27	32	(W)							
Pennsylvania	20 934	50	(D)	12	(D)	22 201	-5.7	1	-	-							
Rhode Island	1 297	9	1 297	-	-	1 003	29.3	(W)	(W)	-							
South Carolina	2 309	3	(D)	3	(D)	536	330.8	(W)	-	-							
South Dakota	(D)	2	(D)	-	-	-	(D)	-	-	-							
Tennessee	2 778	11	2 165	5	612	3 149	-11.8	(W)	(W)	(W)							
Texas	18 511	45	15 951	17	2 559	9 177	101.7	4	3	28							
Utah	2 500	3	2 500	-	-	(S)	(S)	(W)	(W)	-							
Vermont	(D)	2	(D)	-	-	(D)	(D)	-	-	-							
Virginia	7 290	22	7 115	7	175	3 486	109.1	6	6	(W)							
Washington	7 737	27	7 660	6	77	5 287	46.3	4	4	(W)							
West Virginia	5 914	11	4 549	*8	1 364	*1 142	417.9	16	20	15							
Wisconsin	6 521	31	(D)	2	(D)	3 591	81.6	27	-	-							
Wyoming	*376	*5	(D)	2	(D)	115	227.0	53	-	-							

**Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business receipts		Relative standard error of estimate (percent)	
	1982	1977	1982	1977
All kinds of business	402 993	258 204	1	1
General building contractor	1 350	1 760	41	5
Highway and street contractor	(D)	993	—	24
Heavy construction contractor	2 563	932	4	7
Excavating and earthmoving contractor	13 482	10 463	2	9
Painting contractor	—	366	—	19
Wrecking and demolition contractor	335 845	208 369	1	1
Rental of construction machinery or equipment to others	6 125	3 337	(W)	(W)
Retail trade	3 367	6 178	1	(W)
Transportation services	2 770	418	(W)	(W)
Wholesale trade	(D)	472	—	(W)
Other activities	36 549	23 404	1	9

**Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
<b>AVERAGE PER ESTABLISHMENT</b>				
Number of employees**	9.4	8.5	8.8	2
Number of construction workers	8.1	7.2	7.4	1
Number of all other employees	1.4	1.3	1.5	2
Payroll, all employees	\$1,000	146.2	91.0	78.1
Construction worker wages	do	120.4	71.8	62.4
Other employee salaries	do	25.8	19.2	15.7
All business receipts	do	452.8	264.0	230.5
Total construction receipts	do	423.5	246.0	213.6
Payments for materials, components, supplies, and fuels	do	59.6	36.9	23.9
Construction work subcontracted to others	do	40.7	11.7	16.4
Capital expenditures, other than land	do	17.7	18.0	17.0
Gross book value of depreciable assets	do	189.1	132.3	86.5
<b>AVERAGE PER EMPLOYEE</b>				
Payroll, all employees	do	15.5	10.7	8.8
All business receipts	do	48.0	31.1	26.1
Value added††	do	37.3	25.4	21.6
<b>AVERAGE PER CONSTRUCTION WORKER</b>				
Construction worker wages	do	14.9	10.0	8.5
Total construction receipts	do	52.3	34.4	29.1
Construction worker hours	thousand	1.4	(NA)	(NA)
<b>AVERAGE PER OTHER EMPLOYEE</b>				
Other employee salaries	\$1,000	19.1	15.2	10.8
<b>AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS</b>				
Payroll, all employees		.345	.370	.365
Payments for materials, components, supplies, and fuels		.141	.150	.112
Payments for construction work subcontracted to others		.096	.048	.077
Capital expenditures, other than land		.042	.073	.079
Rental payments for machinery, equipment, and structures		.065	.058	(NA)

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Average per dollar of total construction receipts				
					Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work subcontracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
United States	9.4	15.5	1.4	52.3	.345	.141	.096	.042	.065
Alabama	4.7	11.6	1.6	36.6	.385	.169	.026	.063	.071
Alaska	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arizona	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
California	7.5	15.8	1.4	63.7	.295	.125	.099	.052	.118
Colorado	1.3	12.8	1.8	65.1	.196	(D)	.079	(D)	(D)
Connecticut	11.6	21.5	1.8	78.5	.335	.116	.013	(D)	.079
Delaware	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
District of Columbia	(D)	(D)	(D)	(D)	(D)	.179	(D)	.025	.048
Florida	7.5	12.3	1.7	48.0	.315	.170	.041	.083	.097
Georgia	12.8	12.2	1.3	38.1	.397	.117	(D)	.084	.078
Hawaii	(D)	(D)	.8	82.2	(D)	.121	(D)	(D)	.078
Idaho	-	-	-	-	-	-	-	-	-
Illinois	12.7	19.2	1.5	46.0	.486	.150	.053	.090	.063
Indiana	6.2	10.4	1.3	44.0	.295	.109	.059	.042	.042
Iowa	4.5	(D)	1.5	42.6	(D)	.052	(D)	-	.008
Kansas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kentucky	(D)	(D)	1.3	38.8	(D)	.115	.052	.014	.042
Louisiana	12.4	15.7	1.9	45.7	.419	.155	.044	.045	.090
Maine	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maryland	4.8	18.5	1.5	73.5	.313	.134	.161	.041	.039
Massachusetts	11.5	17.7	1.8	50.1	.409	.180	.143	.045	.049
Michigan	9.6	18.3	1.6	65.5	.333	.115	.088	.021	.054
Minnesota	12.0	17.6	1.4	58.9	.399	.158	(D)	(D)	.020
Mississippi	-	-	-	-	-	-	-	-	-
Missouri	6.3	11.5	1.9	85.1	.171	.162	(D)	.011	.084
Montana	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska	*2.3	*20.9	*2.9	*68.3	*307	(D)	*.053	*.004	*.003
Nevada	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey	15.4	17.1	1.3	52.6	.378	.124	.024	.029	.045
New Mexico	(D)	(D)	*2.3	*42.6	(D)	.170	(D)	*.025	*.025
New York	13.8	14.2	1.1	44.4	.358	.129	.095	.038	.032
North Carolina	20.0	(D)	1.4	(D)	(D)	(D)	(D)	(D)	(D)
North Dakota	-	-	-	-	-	-	-	-	-
Ohio	10.0	17.6	1.3	58.5	.344	.125	.151	.041	.041
Oklahoma	5.9	11.5	1.8	58.4	.230	.136	.038	.117	.056
Oregon	(D)	(D)	1.9	42.0	(D)	.170	*.062	*.013	.054
Pennsylvania	10.7	18.1	1.6	63.3	.337	.245	.179	.016	.092
Rhode Island	3.1	(D)	1.5	54.0	(D)	.131	.082	.074	.029
South Carolina	(D)	(D)	(S)	(S)	(D)	(D)	(S)	(S)	(S)
South Dakota	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tennessee	(D)	(D)	.9	23.0	(D)	.076	.190	.022	.020
Texas	7.7	14.0	1.4	57.0	.283	.110	.060	.022	.047
Utah	27.7	15.0	1.7	(D)	(D)	(D)	(D)	(D)	(D)
Vermont	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia	12.0	12.7	2.2	59.0	.255	.140	.216	.046	.133
Washington	6.1	19.6	1.2	59.2	.401	.135	.052	.084	.153
West Virginia	12.9	18.2	1.4	44.4	.481	.149	.027	.042	.022
Wisconsin	6.1	11.1	1.6	40.6	.332	(D)	*.079	(D)	.029
Wyoming	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

## APPENDIX A.

# Explanation of Terms

**Construction**—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

**Number of establishments in business during year**—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

**Number of establishments in business at end of year**—Includes all full-year or part-year establishments that were in business at the end of 1982.

**Proprietors and working partners**—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

**All employees**—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

**Construction workers**—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

**Other employees**—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

**Construction worker hours**—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

**Payroll**—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

**Employer costs for fringe benefits**—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

**All business receipts**—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

**Total construction receipts**—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see "land receipts" below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

**Receipts for work subcontracted in from others**—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

**Land receipts**—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

**Other business receipts**—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

**Net construction receipts**—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

**Value added**—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

**Selected payments**—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors. General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

- payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

**Storage capacity for fuels**—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

**Rental payments for machinery, equipment, and structures**—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

**Selected purchased services**—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

**Fixed assets and depreciation**—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book value—acquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

**Capital expenditures**—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- **New structures and related facilities**—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- **New machinery and equipment**—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- **New automobiles and trucks intended primarily for highway use**—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- **Used structures and related facilities**—Covers expenditures for used structures and related facilities acquired from others.
- **Used machinery and equipment**—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks. Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

**Value of inventories**—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

**Ownership of construction projects**—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

**Types of construction**—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

**Building construction:**

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (includes townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- **Other residential buildings**—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- **Bank buildings and other financial institutions**—Includes all buildings which are used primarily to house banks or other financial institutions.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices.
- **Other commercial buildings such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Elevated highways**—Includes roads, highways, and causeways built on structural supports.
- **Bridges**—Includes viaducts, trestles, and overpasses.
- **Tunnels**—Includes highway, pedestrian, and railway tunnels, etc.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.

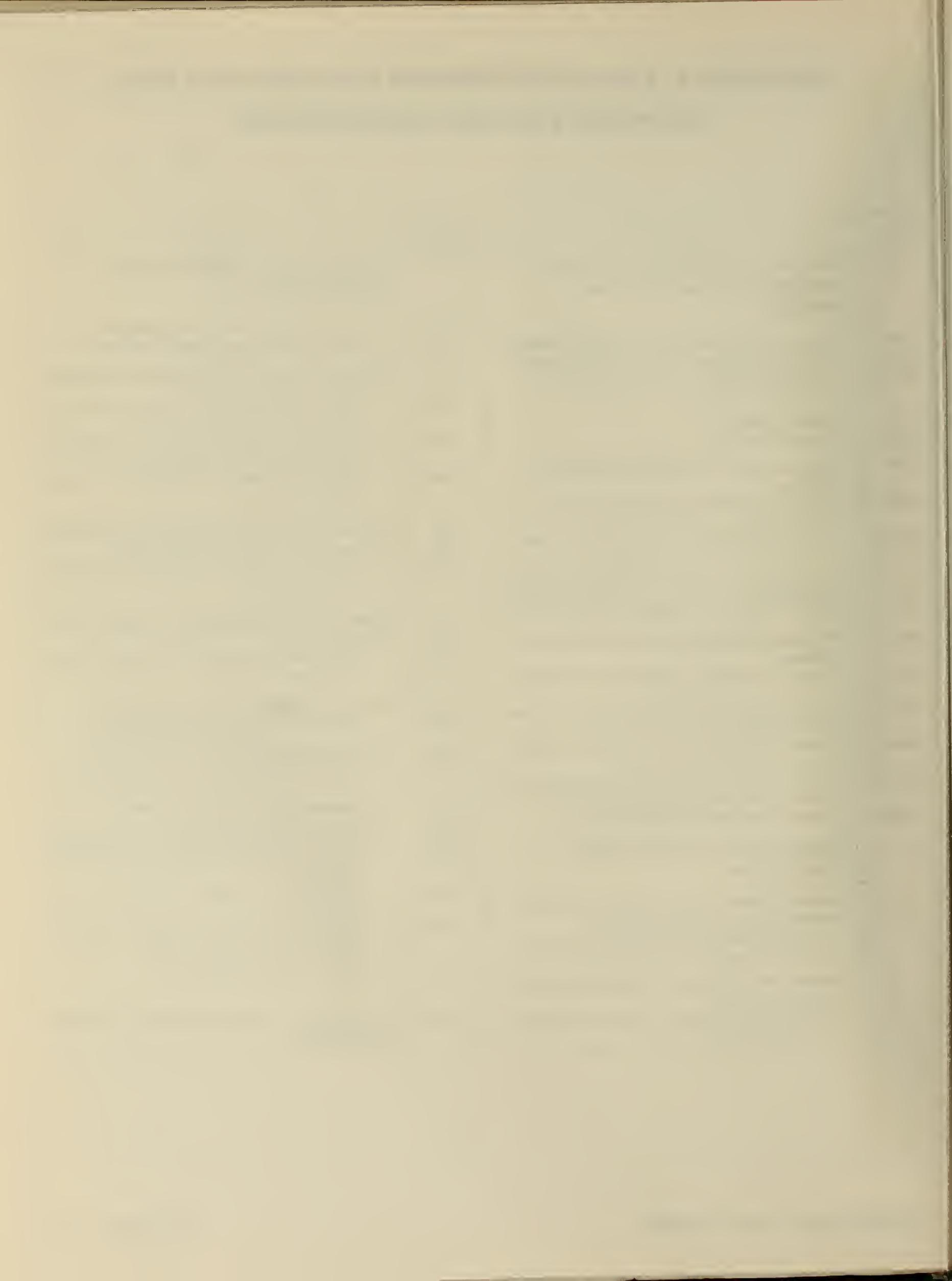
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- **Power and communication transmission lines, towers, and related facilities**—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.
- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

**Location of construction work**—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.



## APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	<b>BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS</b>	17	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.</b>
152	<b>General Building Contractors—Residential Buildings</b>	173	<b>Electrical Work Special Trade Contractors</b>
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family Houses	174	<b>Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors</b>
153	<b>Operative Builders</b>	1741	Masonry, Stone Setting, and Other Stonework Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors
154	<b>General Building Contractors—Nonresidential Buildings</b>	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	<b>Carpentering and Flooring Special Trade Contractors</b>
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentering Special Trade Contractors
16	<b>CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS</b>	1752	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
161	<b>Highway and Street Construction, Except Elevated Highways</b>	176	<b>Roofing and Sheet Metal Work Special Trade Contractors</b>
1611	Highway and Street Construction Contractors	1761	Roofing and Sheet Metal Work Special Trade Contractors
162	<b>Heavy Construction, Except Highway and Street Construction</b>	177	<b>Concrete Work Special Trade Contractors</b>
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipe Line, Communication and Power Line Construction Contractors	178	<b>Water Well Drilling Special Trade Contractors</b>
1629	Heavy Construction Contractors, N.E.C.	1781	Water Well Drilling Special Trade Contractors
17	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS</b>	179	<b>Miscellaneous Special Trade Contractors</b>
171	<b>Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors</b>	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	<b>Painting, Paper Hanging, and Decorating Special Trade Contractors</b>	1794	Excavating and Foundation Work Special Trade Contractors
1721	Painting, Paper Hanging, and Decorating Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
		1799	Special Trade Contractors, N.E.C.
		6552	<b>SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES</b>



# APPENDIX C.

## Geographic Divisions and States

### NEW ENGLAND STATES

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

### MIDDLE ATLANTIC STATES

New Jersey  
New York  
Pennsylvania

### EAST NORTH CENTRAL STATES

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

### WEST NORTH CENTRAL STATES

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### SOUTH ATLANTIC STATES

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

### SOUTH ATLANTIC STATES—Con.

North Carolina  
South Carolina  
Virginia  
West Virginia

### EAST SOUTH CENTRAL STATES

Alabama  
Kentucky  
Mississippi  
Tennessee

### WEST SOUTH CENTRAL STATES

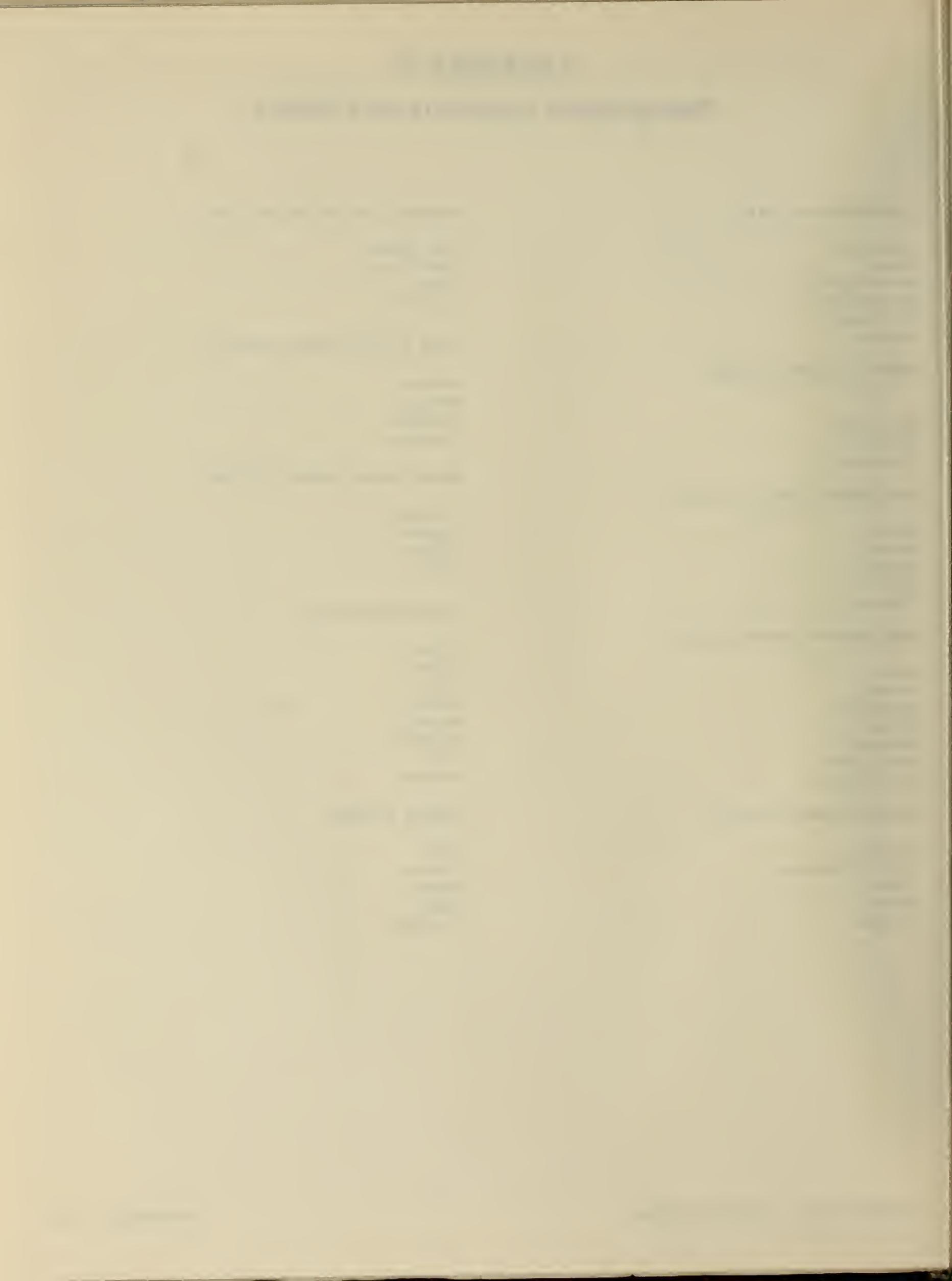
Arkansas  
Louisiana  
Oklahoma  
Texas

### MOUNTAIN STATES

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

### PACIFIC STATES

Alaska  
California  
Hawaii  
Oregon  
Washington



**REFERENCE MATERIALS • ORDER FORMS • PUBLICATION CORRECTIONS**

*Please send me the items marked (X) below.*

Corrections (if there are any) for this publication—**Construction Industries, Wrecking and Demolition Work Special Trade Contractors, CC82-I-24**

If you purchase several different reports from the 1982 Economic Censuses, you should complete this form from each of the reports and return it to the address shown below to receive publication corrections. However, you should complete the following on **only** one of the forms.

Guide to the 1982 Economic Censuses and Related Statistics

Monthly Product Announcement—A monthly notice of all products released by the Census Bureau during the previous month—useful primarily to persons who plan to purchase publications, tapes, etc., in the future.

Publication announcements and order forms — *Mark (X) subjects in which you are interested.*

<input type="checkbox"/> Retail Trade	<input type="checkbox"/> Economic Censuses of Outlying Areas (Puerto Rico, Guam, Virgin Islands, and Northern Mariana Islands)	<input type="checkbox"/> Governments
<input type="checkbox"/> Wholesale Trade	<input type="checkbox"/> Enterprise Statistics	<input type="checkbox"/> Foreign Trade
<input type="checkbox"/> Service Industries	<input type="checkbox"/> Minority- and Women-Owned Businesses	<input type="checkbox"/> Population
<input type="checkbox"/> Construction Industries	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Housing
<input type="checkbox"/> Manufacturing	<input type="checkbox"/> County Business Patterns	<input type="checkbox"/> International Statistics
<input type="checkbox"/> Mineral Industries	<input type="checkbox"/> Quarterly Financial Report	<input type="checkbox"/> Geography
<input type="checkbox"/> Transportation		<input type="checkbox"/> Guides, Catalogs, etc.

Name

Organization

Address/PO Box

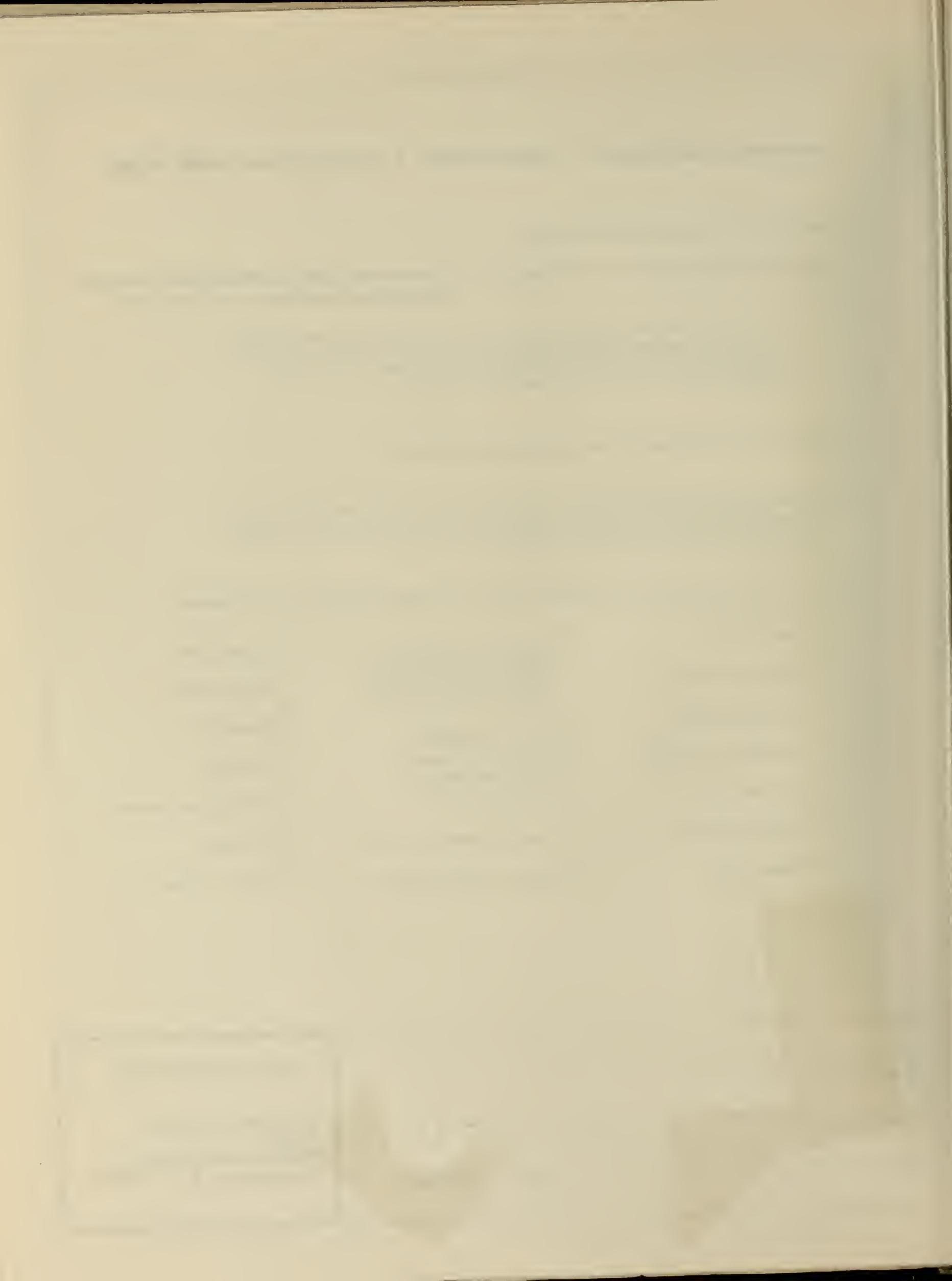
City

State

ZIP Code

*Mail completed form to*

**Customer Services  
DUSD  
Bureau of the Census  
Washington, D.C. 20233**



# PUBLICATION PROGRAM

## 1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

### Preliminary Reports

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed final reports.

### Final Reports

Final detailed statistics are issued in separate paperbound reports.

#### Industry series—28 reports (CC82-I-1 to -28)

Industry series—27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary—1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

#### Geographic area series—10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

#### Special series—1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1)—This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

### Final Report Volume

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

### Microfiche

All published data also are available on microfiche.

## OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

Superintendent of Documents  
U.S. Government Printing Office  
Washington, D.C. 20402

|||||



POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF COMMERCE  
COM-202

Official Business  
Penalty for Private Use, \$300

Special Fourth-Class  
Rate-Book









5 0673 01038444 7

F  
Not